

WEEKLY EDITION
OF THE

PUBLISHED BY
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Frost Work on the Window.

ELLA J. MEADE.

Mountains and valleys, blossoming trees,
Temple, cathedral, fane,
Beautiful flowers, and birds, and bees—
All on the window-pane;
Done by a painter whose name is known
Only by matchless art—
Mystical touch of an icy hand,
Breath of a frozen heart.

Rivers of crystal and trees of life,
Heavenly mansions fair,
Love and its joys where there is no strife—
All of these "Over There;"
Only revealed by the icy hand
And by the frozen breath
Of the mysterious pow'r we name
King of all Terrors—Death.

—Chicago Tribune.

On the 9th inst. the Bingham Smoker Factory caught fire—and all "ended in smoke." It was partly insured. Fortunately, Mr. Bingham had his finished smokers stored in another building.

Mr. W. B. Stephens, of Steuben Co., N. Y., has sent us a sample of a reversible frame. It is similar to Novice's tin point, but the tin runs to the centre of the outside of the side-bar, and is there fastened with a wire nail clinched, and reverses on that pivot.

A periodical in the Golden State says that "A bee-keeper at Riverside, Calif., has 33 colonies of bees which produced, during the last season, 7¼ tons of honey, an average of nearly 440 pounds to the colony.

The winter meeting of the Bay of Quinte Bee-Keepers' Association will be held at the City Hall, Belleville, Ont., Feb. 26, 1885, at 1 p. m.

Names That Mislead.

The Providence *Journal* calls attention to some curiosities of misnomer: "Black lead" is not lead at all, but a compound of carbon and a small quantity of iron.

"Brazilian grass" never grew in Brazil, and is not grass; it is nothing but strips of Palm leaf.

"Burgundy pitch" is not pitch, and does not come from Burgundy; the greater part of it is resin and Palm-oil.

"Catgut" is made from the entrails of sheep.

"Cuttle-bone" is not bone, but a kind of chalk once enclosed in the fossil remains of extinct specimens of cuttle-fish.

"German silver" was not invented in Germany, and does not contain a particle of silver.

"Cleopatra's needle" was not built by the Egyptian queen, nor in her honor.

"Pompey's pillar" had no historical connection with Pompey in any way.

"Sealing-wax" does not contain a particle of wax, but is composed of Venice turpentine, shellac and cinnamon.

The "tube-rose" is not a rose, but a species of Polianthes.

"Turkish baths" did not originate in Turkey, and are not baths, but heated chambers.

"Whalebone" is not bone, and is said not to possess a single property of bone.

In the vocabulary of Bee-Keeping we find similar misnomers: "Artificial Comb" is not comb at all, but refers to sheets of wax, with corrugations, marking out the bases of the cells on either side.

An "Artificial Swarm" is not a swarm, but one part of a divided colony of bees.

"Candied Honey" is not "incrusted or preserved with sugar," but pure honey granulated.

"Dollar Queens" are not queens in any sense of the word—they are female bees which may become mothers, but will never "reign like a queen;" neither are they always sold for a dollar, the price varying from \$1.50 in the spring, to 50 cents in the fall.

"Grape Sugar" is not "sugar," neither is it obtained from grapes, but from corn by the action of sulphuric acid.

"Honey-Dew" is neither honey nor dew, but exudations from plant-lice, aphids, etc.

Many other "names that mislead" may be enumerated, but these curiosities of apicultural misnomer are sufficient to show that there is a great necessity for "calling things by their right names."

Dead Bees on the Snow.

In reply to an enquiry in the *Prairie Farmer*, Mrs. L. Harrison remarks as follows:

It is an immutable law of nature that all living things must die, and bees are no exception to the rule. During the working season, the limit of bees' lives is about 90 days; during hibernation it is much longer. Among the lower animals, as death approaches, it appears that their instinct is to withdraw from their fellows and die in retirement. The loss of bees by flying out and dropping in the snow is only trivial; the major part seen lying in the snow, died in the hive, and were carried out by their companions. It will not do to stop up the entrances; it is necessary for them to be open, so that, if mild days occur, the bees can fly out for cleansing; and also have an opportunity to carry out the dead, so that the air in the hive may be kept pure. If the hive is closed, the accumulating dead soon prevent the entrance of fresh air, and the decaying stench breeds disease and death. Experiments have been made with bees, during zero weather, by taking off the cover and bottom of the hive; yet the bees did not perish. Dampness and foul air are the worst enemies of bees.

The above will answer several similar questions sent to this office.

While in New Orleans we shall "put up" at the Hotel Windsor, which is kept on the European plan, and is located just opposite the U. S. Government Building, Exposition Grounds, Corner of St. Charles Ave. It contains 500 sleeping-rooms, Ladies' Parlor and Reception Rooms, Gents' Reading Room and office, all on first floor. Two lines of cars pass the hotel for down town every minute. Rates, one dollar per day for each person. There is a Restaurant in connection with the Hotel, where meals can be obtained.

While ten men watch for chances, one man makes chances. While ten men watch for something to turn up, one turns something up; so while ten fail, one succeeds and is called a man of luck—the favorite of fortune. There is no luck like pluck, and fortune must favor those who are most indifferent to fortune.—Ez.



WITH
REPLIES by Prominent Apirists.

Spraying Fruit Trees.

Query, No. 14.—If fruit trees when in blossom are sprayed with Paris green, what will be the effects on bees? What is the best thing to do to prevent bad effects? Would it help the matter if London purple were used instead of Paris green?—Subscriber.

Prof. A. J. COOK replies as follows: "I should have very little or no fear of any harm. The nectar and pollen are all that the bee cares for, and they would be so free from the poison, (the nectar would be wholly free), that I am quite sure that they would work no injury. London purple and Paris green are alike poisonous, so one would have no preference over the other. But why spray the trees thus early? The only object will be to destroy the codling moth-larvæ. To rid our fruit of this greatest apple pest, the poison should not be applied until the blossoms have fallen."

Dampness and Mildew.

Query, No. 15.—My bee-house is damp and mouldy but the bees are quiet. Must I remove the bees to my cellar, or leave them in the dampness?—C. J.

Dr. J. P. H. BROWN answers thus: "If the bees are quiet and in good condition, I would not disturb them; but I would sprinkle lime over the floor, and place boxes filled with it in different parts of the room to absorb moisture."

Where Bees First Deposit Honey.

Query, No. 16.—Do bees, when carrying in honey rapidly from the fields, store it directly in the surplus sections? or do they place it in the body of the hive to ripen, and then carry it above?—J. W. B.

Prof. A. J. COOK answers thus: "Mr. Doolittle says that they do neither, but give it to the nurse-bees, and the latter store it away. I have marked bees and found that they actually do carry honey to the cells, and even to the surplus sections above the brood-chamber. It may be that all do not do so."

Supervision of Labor.

Query, No. 17.—I have several apiaries, and would like the best plan to systematically manage them?—B.

Dr. J. P. H. BROWN says: "To answer this question satisfactorily would require some knowledge of the localities, and of the skill, industry and executive ability of the manager. What is 'the best plan' for one person might prove to be a very poor one for another. Everything must be reduced to a perfect system and order. The time should be divided between the apiaries as the necessity of the case

requires. Base the management upon skill and a level head."

Bees Expelling Water from Sweets.

Query, No. 14.—Some have asserted that bees have the power of expelling water from diluted sweets, when on the wing, etc. Now, I long to see this matter subjected to the eye of science. Has there been a gland discovered whose function, resembling that of the kidneys, seems to be that of separating water, etc.?—La Porte City, Iowa.

W. Z. HUTCHINSON remarks as follows: "When feeding bees a considerably diluted food, I have seen them eject a colorless and tasteless fluid when flying to and from the hives. I have also seen the same phenomenon when the bees were leaving their hives in the morning during an excellent flow of honey; and I have seen the same thing when the bees were working upon buckwheat, but the ejection was done at the field of buckwheat."

G. W. DEMAREE replies thus: "That bees have the power to separate and expel the watery portion of 'diluted sweets' while in the honey-sac, is a proposition unsupported by any conclusive evidence, so far as I have seen. The discharges in the form of a spray, seen when feeding bees sweetened water in the open air, are most probably caused by a well-filled honey-sac pressing on the lower intestines, discharging their watery contents. No 'gland,' of which physiologists have any knowledge, could perform its functions in so short an interval of time, as intervenes between the filling of the honey-sac and the discharges seen."

G. M. DOOLITTLE answers thus: "I think that the assertion is a mistake; for there is no connection that I can find between the honey stomach of the bee and the intestines of the same, except by way of the mouth. This water seen to fall from bees while on the wing, I believe to be thin excrement, after carefully watching the matter for several years. At least I am convinced that it is the bees that have just left the hive that exude it, rather than those returning from the fields with nectar."

Prof. A. J. COOK remarks thus: "I have never witnessed this phenomenon. I know of no physical law that would enable bees to separate water from nectar enroute to the hive. I doubt their having any such power. The renal or kidney-like organs of bees consist of gastric tubules which open into the stomach. I know of no way to explain the phenomenon, and so I am led to wonder if the observation is not at fault. Of course I know and appreciate the truth of Hamlet's remark: 'There are more things in heaven and earth, Horatio, than are dreamed of in your philosophy.'"

The New Jersey and Eastern Bee-Keepers' Association will hold their next annual convention at Cooper Union, in New York City, beginning on Wednesday, March 11, 1885, and to continue two days or more. The committee promises a good programme, and extend a cordial invitation to all. W. B. TREADWELL, Ass't. Sec.

Bee-Diarrhea in the South.

Mr. G. W. Demaree, Christiansburg, Ky., sends the following additional remarks on query No. 4 as published on page 36:

Having answered the query just as it stands as a question, I would like to answer it as it "appears to me." In the first place I beg the pardon of the querist, for saying that I am quite sure that he is mistaken about the condition of his bees. What he calls "diarrhea" is not diarrhea in fact. I have several times seen in my apiary, in the early spring after breeding had gotten well started and suddenly checked by bad weather, a state of things similar to that described by the querist.

It is a well known fact that young bees, when several days old, must have a flight in the open air or suffer the consequences. It is a law of the youngling that it must void or perish, and since nature requires that young bees must take wing to answer the calls of nature, it is easy to see what must be the inevitable consequences of forced confinement at an unpropitious time. If Mr. Doolittle is right in his conclusions, and I believe he has thrown a flood of light on this subject, a genuine case of bee-diarrhea must be sought for in a hive where there are none but adult bees. Such a case has never been reported from the South by an experienced apiarist.

Plenty of air-space above the frames will prevent untimely brood-rearing in my locality. I discovered this in a rather singular and unpleasant way. Some thieves carried off a section-case filled with sections, leaving an air-space of over 1,000 cubic inches above the frames; I failed to find this out until spring, and this colony was strong and in excellent health, but it had no brood. The bees were then warmed with quilts, and made up for all lost time, outstripping other colonies which were well on the way when they commenced.

The Cedar Valley Bee-Keepers' Association will hold its next meeting on Feb. 24 and 25, 1885, in the Council Rooms (opposite Burr's Hotel), Cedar Falls, Iowa. A. D. BENNETT, Sec.

The second annual meeting of the Seneca County Bee-Keepers' Association will be held in the Engine House at Ovid, N. Y., on Feb. 11, 1885, at 9 a. m. All interested are cordially invited to attend, and make the meeting as profitable as possible. All implements of the apiary sent to the Secretary will be exhibited at the meeting, and will be disposed of or returned as the owner directs.

IRA WILSON, Sec.

One of the handsomest and most unique and original ideas in chromo-lithography is the Columbia Valentine, just issued by the Pope Manufacturing Co., of Boston, Mass. The design is in twelve colors, from a painting by Copeland, of Boston, is mounted on a panel, and is a genuine work of picturesque art, representing, in three scenic sections, the morning, noon, and night of bicycling.

CORRESPONDENCE

Explanatory.—The figures BEFORE the names indicate the number of years that the person has kept bees. Those AFTER, show the number of colonies the writer had in the previous spring and fall, or fall and spring, as the time of the year may require.

This mark ⊙ indicates that the apiarist is located near the centre of the State named: ♂ north of the centre; ♀ south; ◊ east; ◐ west; and this ♂ northeast; ◐ northwest; ◑ southeast; and ♀ southwest of the centre of the State mentioned.

For the American Bee Journal.

Working Against Nature.

DR. G. L. TINKER.

In his reply to my article on page 777 of the BEE JOURNAL for 1884, Mr. W. Z. Hutchinson, after stating that he had tried the Heddon plan of controlling after-swarms, says: "There has been no robbing nor any 'disease.'" Yet Mr. Frank D. Mitchell, in practicing the same plan, had severe robbing to follow, and disaster was averted only by prompt attention. Mr. Mitchell said nothing about disease occurring, nor did I; neither did I think that any reader of the BEE JOURNAL would so construe it.

As to the "blind instincts of nature" and Mr. Heddon's "reason." He may have asserted the latter and disregarded the former many times when a better understanding would have led to different practice. No man is so perfect that his reason may be said to be "superior" to instinct in directing the course of events in nature. Perfect knowledge is not one of our attributes, given or acquired, while nature makes few mistakes. Take away the instinct of the bees, and our wise men would make a sorry plight in attempting to order a better system than that of nature. And right here, I shall be glad to have it remembered, that the first grand mistake would probably be to order that the "silly" bees should "touch not, taste not, handle not" that deadly thing—pollen—in winter confinement!

My idea of working against nature is where the bee-master, ill-directed by reason, institutes methods and practices of less profit than a course prompted by the instinct of the bees. The controlling of the after-swarming of a colony, on the Heddon plan, that has cast an early prime swarm, will result in a failure to get as much surplus as by a method of management by which the old colony is not deprived of so many bees as to render it unable to cast a second swarm or to store any surplus, unless the season for surplus is a protracted one. In from 5 to 8 days after a first swarm issues, the old colony (if not allowed to swarm again) will ordinarily begin work in the sections and store nearly as much surplus as the swarm. Now,

if Mr. Hutchinson will give me a sufficient reason why the old colony should not be allowed to produce surplus, and the young bees profitably employed, then I may be convinced that it may be profitable to work against nature in the manner advised.

I am aware that if nearly all of the bees be taken from the old colony and given to the new one, that the latter will store a larger amount of surplus, but I am not aware that it would store more than both the new one and the old one if divided by swarming only once in a natural manner. Mr. Heddon has truly stated (nor did I misunderstand him as Mr. Hutchinson thinks) "that the largest yields on record have come from the colonies which cast not only one, but two or three swarms." Mr. Heddon states what has been often recorded in the BEE JOURNAL, of unprecedented yields of honey in which after-swarms have taken a part. There is no doubt but that a colony which swarms, if properly managed, will produce more surplus than one which does not swarm; but the recorded facts show the old colony to be no mean factor in the production of the large yields, whether it casts a second swarm or not. This Mr. Hutchinson apparently denies.

While the above represents my views as to all early swarming, I will not say that I would not favor Mr. Heddon's plan of controlling after-swarming, where prime swarms issue within 10 to 15 days of the close of the honey harvest. With these late swarms contracted on about six brood-frames with a queen-excluder, the sections on the old colony may be transferred to the new one at once, and as many bees taken as the old colony can safely spare. They may be shaken from the brood-combs in front of the new colony, or taken by the slower process of moving the old colony about the new one, covering it with a cloth, etc., and by this management a larger surplus may be obtained. But this contracting of the brood-nest is not one of Mr. Heddon's methods, and without it I can see no advantage in his plan whatever, unless it may be to save a little labor, which is offset by obtaining a small amount of surplus.

Where there is so much difficulty in opening hives the brood-frames of which are bound together by new combs built on their tops and between them, the Heddon plan might be advised as a choice of evils, especially with ugly bees; but in instances where the combs may be readily lifted from the hives, I find that the time taken to go through them after queen-cells about the sixth day after a prime swarm issues, is not great. Of course it is many times not necessary, as every bee-keeper will be thoughtful enough to give to colonies, a few days after they cast a prime swarm, a laying queen, a virgin queen, or a queen-cell about to hatch, if he has them and does not care to save the queen-cells of the colony to be operated on; but with the exception of the laying queen, these latter plans are not always proof against after-

swarms. Another objection to the Heddon plan is with highly prolific queens, like the Cyprians, the Syrians, the Syrio-Italians or Albinos.

BEST MANAGEMENT FOR SURPLUS.

If we build up colonies of these bees on ten or more brood-combs to their fullest capacity by the time of the honey-flow, and then hive all swarms on from 6 to 7 brood-frames, as is advisable, and prevent after-swarming on the Heddon plan, we shall get too many bees in the new colonies. I divide up these very large colonies as nearly even as possible, which I am able to do by placing the new colony on the old stand and removing the old one to a new location. By the time the most of the young bees have hatched, both colonies will be of about the same strength and produce about the same amount of comb honey. I also take two or more brood-combs from the old colony. The swarms are hived on 6 or 7 frames half filled with foundation, or on as many frames of empty comb. Soon after, the combs taken from the old colony are given to them, and as many frames taken from the new one; or, if the queen's wing is not clipped, and the swarm is allowed to cluster, I place the combs in the hive at once, put on the sections and then hive the swarm. The combs taken from the old colony are always placed at the outside of the brood-chamber, and the frames with foundation, in the centre.

After hiving a swarm on so few combs, the hive must be well ventilated or they will desert it. As I put on the sections at once in all cases, desertion is prevented by giving ventilation through the sections at the top without letting out the bees. After two days these openings are closed. I also advise the use of a queen-excluder on all colonies, and find that, if properly made, they do not hinder the storing of surplus in sections or frames; but if fewer brood-combs than six be given, the bees will store much pollen in the sections.

CONTROLLING BROOD-REARING.

This I regard as essential to the best results. When it is seen that the eggs deposited will not produce mature bees until too late to be of service in storing surplus, then both old colonies and new ones should be contracted on a few brood-combs, and queen-excluders should be placed beneath the sections, and the work of the queen narrowed down to the lowest possible limits. Then, as soon as the season of surplus closes, all surplus is to be removed, when the bees, finding themselves short of stores, breed but little. Colonies having highly prolific queens, which I have managed on this plan, have been found to be quite small in the fall, and where increase is not desirable, it would be easy to unite them; and although a little more troublesome then, than during a honey-flow, it comes at a time when robbing and other disturbance will not interfere with the work of the bees as when profitably storing surplus. So much for Mr.

Hutchinson's fears that working against nature at a time when the bees are not working at a profit to their owner is not more wise than at other times.

But Mr. Hutchinson will doubtless say that there is much work about Mr. Doolittle's method of contracting the brood-chambers of hives which contain colonies run for comb honey. In reply, I would ask, is it not better to exhaust the honey-flow of a locality by a fewer number of colonies built up very strong, than to have so many weak colonies in 8-frame hives to do the same work? These little colonies require about the same labor on the part of the bee-keeper, and it is an open question whether the bees in the larger colonies will not produce the most surplus. I say that they will.

In managing colonies on the plan here given, we must have hives which can readily be opened, and without unduly disturbing the bees. (I very rarely use a smoker). Then when it comes to taking out brood-frames, contracting brood-chambers or cutting out queen-cells, I can do it without any great ado or loss of time. In case I overlook a queen-cell, which is rare, and an after-swarm issues, I put it back after cutting out the offending queen-cell. After handling hives and brood-frames for several years on the plan first given to the public by Mr. Doolittle, I conclude, on the whole, that it is more important to have readily movable brood-frames than "readily movable" hives.

New Philadelphia, O.

For the American Bee Journal.

My Reversible Frame.

G. M. ALVES.

An illustration is herewith submitted to those who think of using a reversible frame during the coming season. As yet, the writer has never used this frame, but he can see no reason why it would not work admirably in practice, and he is now making a number of them for his own use next season.

The end-pieces are $\frac{1}{4} \times \frac{3}{8}$ inches and of the required length. The top and bottom bars are each triangular in shape. The center bar is $\frac{5}{8}$ of an inch square with a diagonal up; the other diagonal will come even with the side of the end-pieces, as the diagonal of $\frac{5}{8}$ is equal to $\frac{3}{4}$. Of course it will be seen that the center bar is not necessary to the frame or its arrangement, but its use is preferred by the writer, for the following reasons:

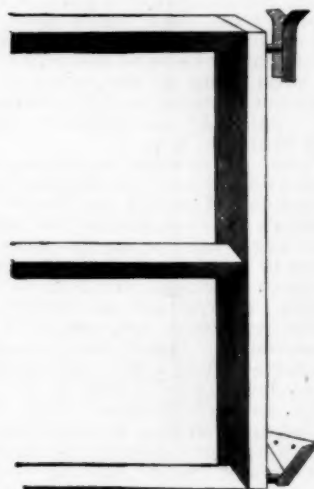
1. By its use he expects to be enabled to obtain much truer combs than without it, as he finds that while bees will build from a downward projection, they are also disposed to build down to an upward projection.

2. Its use will render the frame much stiffer, and the comb will be held in place much better.

Near the top and bottom of the end-pieces of the frame, good sized wire nails with their heads cut off are driven in so as to project 5-16 of an inch. In lieu of rabbets to the hive,

tins of the form shown in the illustration, are secured in place at the front and back of the hive, to receive the nail-projections of the frame. It will be seen that the bottom tins support the weight of the frame, while those at the top are merely slots to hold the top of the frame in place. The tins are easily and quickly made of a single piece of tin—the only solder used is where the sides of the bottom tins come together, in order to more securely hold the weight of the frame. Where the space between the frame and the hive is $\frac{3}{8}$ of an inch, the depth or projections of the tins should be $\frac{1}{4}$ of an inch. This with the 5-16 projection of the nails of the frame, will give $\frac{1}{2}$ of an inch play between the back of the tins and the ends of the nails, and at the same time will prevent the nails from getting out of the tins.

Now, with this frame and its fittings aside from all of the advantages accruing from a reversible frame, the following merits over the ordinary



hanging frame are obtained: 1. The frame is stronger and less liable to get out of true. 2. The frames are all held equally spaced, both at the top and bottom. It will be seen that the sides of the lower tins act as guides, hence the spacing of the frames at the bottom is automatic.

As to objections: It might be said that it frequently happens that certain frames cannot well be taken out without moving the adjacent frames a little off, and that this is done with the ordinary hanging frame by sliding it laterally on the rabbets of the hive, and that this could not be done with this frame; but it may be answered that we simply lift the top nails of the frame wished to be moved off, out of their slots, lean the frame to the required side, and then allow the bottom to gently glide into its former support.

If it be objected that propolis might interfere with the working of the frames, it may be said that the space between the ends of the frames and the tin projection is only $\frac{1}{8}$ of an inch it is true, but that little propolis could be joined to the thin edge of tin. Those who have doubts on this point, in lieu of the wire nails to the frames,

could use short pieces of T-shaped tin; the flanges being wide enough to cover the entire width of the frame.

It is believed that the more this frame is studied the more it will find favor.

Henderson, Ky.

For the American Bee Journal.

My Experience in Wintering Bees.

L. N. TONGUE, (25-70).

My first lessons in apiculture were learned in Belvidere, Ill., from a practical bee-man, whose soul was in the work. He was the first man who drove a colony out of a hive and retained one in the old hive; he also was the first man to fasten slats in the top of the hive for bees to build combs upon; and after experimenting, the space adopted was $1\frac{3}{8}$ inches from center to center of each slat. Movable frames were not in use when my instructor adopted his plan of having combs built straight.

In 1880 I went to Minnesota where I wintered my bees in a cellar for the first time. When I took them out of the cellar in the spring, the hives, combs, and even the joists overhead, were completely covered with mold and dripping with water, and, notwithstanding all this, the bees came out all right. In 1882 I came to this place and bought 50 colonies, increased them to 133, and sold 21 colonies in the fall of 1882. Then I moved my bees 9 miles and put them into a cellar without giving them a chance to fly. The cellar froze up solid. In the spring of 1883 I carried them out for a fly and then put them back. When I took them out to stay, I had 4 colonies left, after spring dwindling. No one need say that I do not know what bee-diarrhea is. I never shall forget the sight nor the stench.

I bought 4 more colonies and the 8 I increased to 25 colonies. I wintered them in a cellar, and in the spring of 1884 I moved them $3\frac{1}{2}$ miles to gather basswood honey. I left them in the care of my wife and son and then I went to Tennessee to take charge of an apiary.

My experience teaches me that bees in a Southern climate would have the diarrhea worse than they do in a Northern climate, were it not for the frequent flights which they have in the South. Bees gather immense quantities of pollen there, and they consume much for brood-rearing. While I was in Tennessee I had frequent occasions to witness the copious discharge of pollen by bees when taking a flight; also when shaking bees from a frame, especially when they had been confined in the hive by cold, rainy weather. Had those bees been retained in their hives until their abdomens had become inflamed, diarrhea would have been the result.

From long experience and close observation, I conclude that Mr. Heddon is correct in this pollen question. Pollen is the prime cause of bee-diarrhea, other causes being secondary. Bees cannot rear brood without pollen; hence by removing all pollen in

the fall and feeding granulated-sugar syrup, is a sure and safe way to winter bees in a Northern climate.

The 25 colonies were increased to 70 and I gave my son 14 for his share, leaving me 56; but I expect to lose as many as 7 in wintering. The season was poor in some localities in this section. I secured 1,000 pounds of honey. Next season I purpose to run my apiary for honey instead of increase.

Hillsboro, 9 Wis., Jan. 26, 1885.

For the American Bee Journal.

Peculiarly Diseased Colonies.

ISAAC SHARP.

On page 555 of the BEE JOURNAL for 1884, I wrote about some bees acting differently than any that I had ever heard of. In the season of 1880 I had a colony that carried out sick bees and dead ones until nearly July, so much so that when I was away from home and any person passing through my apiary would pass that colony they would at once enquire what was the matter with it, on account of so many dead bees being about it. I tried to keep the bees cleared away so that it would not be noticed, but all to no purpose. I might clean all away and in less than an hour there would be enough sick and dying bees on the alighting-board to attract the attention of almost any one who cared to go near a hive of bees.

The queen of this colony was a daughter of an imported "Dadant" queen which I obtained in the spring of 1878. She was reared in that year. During all this time the queen kept the brood about up to the usual amount. The brood, from the eggs to the mature bees, appeared all right. The increase was kept about equal to the decrease from dying. During this time the bees consumed about all the honey they gathered.

The trouble ceased toward the latter part of June and the bees stored enough honey for winter. This colony was one of 6 belonging to my daughter and the only one that survived the terrible winter of 1880-81. The increase of this colony has been kept strictly to the account of my daughter who assists in the apiary and takes care of and sells her own honey. I had 5 colonies to winter out of about 30. Up to this time my daughter's bees have produced nearly one-third more honey than mine. She had 17 good colonies to put into winter quarters. Since then the disease of which I speak has not showed itself in any of her colonies. Now, the question is, what was the matter with that colony in the summer of 1880?

As stated on page 555 of the BEE JOURNAL for 1884, the colony which was diseased last summer was diseased in the same way, but instead of the trouble ceasing toward the latter part of June, the disease continued. The colony stored some honey around the brood-nest during the best honey-flow, but it did not get strong enough to store any surplus. Soon after the

first honey-flow was over they began to gradually dwindle away. They consumed all their stores but kept brood-rearing going on all the time, and even until there was not enough bees to cover more than one side of a frame. Sometimes it was a wonder to me how they had so much capped brood with so few bees. When the cool days of fall set in, the bees ceased to fly, not having any honey.

Having no desire to preserve this colony, I gave it no food, and the last time I opened the hive there were live bees in it—the queen and probably about 50 young bees with a few scattering cells of capped brood which had small holes cut in the caps, and some of the cells had the caps entirely cut away and a part of the contents removed. Of course the bees were starving and were subsisting on the contents of the capped cells. Soon after this I found the dead queen, and all was over. This hive and the combs as the bees left them, with a little cleaning, I consider all right to put a swarm in next season, as the moths did not trouble it. My apiary is not troubled with moths.

Judging the future by the past, I have not much to fear; but should a large number of my colonies become diseased in the same manner, the loss would be considerable. I had a good opportunity to observe the working of this colony as it stood close to my shop-door. I have kept bees for 30 years, and during the last 12 years I have had them in frame hives and have reared queens and studied bee-keeping, but have never known of bees diseased as were these two colonies of which I have written.

Waveland, Ind.

For the American Bee Journal.

Apicultural Humbug and Fraud.

W. F. CLARKE.

When in Chicago, last October, I spent an hour or two in the palatial establishment of Jansen, McClurg & Co. A book entitled "Money Making for Ladies," published in 1882, caught my eye. I am always interested in schemes of money-making for the fair sex. They are well up in the art of spending money, and if they can only be put in the way of making the article, they may enjoy the luxury of "shopping" without feeling that a monster of a man will be mercilessly criticising their expenditures. But oh, preserve us from such dishonest gains as the following:

"Making honey from sugar has been successfully tried," we are told in the work which I have named, and the *modus operandi* is described at length. The author states that 15 pounds of sugar were fed to a colony of bees, in the form of syrup. At the end of 20 days, lo! the syrup had disappeared, but in place thereof, there were 20 pounds of first-quality honey which sold (when, and where?) for 30 cents per pound! The sugar cost \$1.80, and the honey brought \$6.00, the difference being the result of three weeks' industrious labor on the part

of "the little, busy bee." It is added that "the flavor of the honey was excellent," and we are assured "it cannot be told from wild-flower honey."

The author strongly advises ladies to try this method of money-making, to render the deception as perfect as possible, and suggests that the syrup be concocted with "a little tea made from white clover heads of which bees are very fond!" There is worse to come. It is recommended to add a little brandy to this tea, of which, also, we are told that "bees are very fond." A facetious poet lately charged bees with being misers, now let someone strike the lyre (liar), and proclaim, in lofty strains of verse, that they are tipplers. The author further advises lady bee-keepers to "secure a beautiful white pink tinge" to honey, by "feeding a little cochineal."

I would not have been so tardy in exposing this imposition on the credulity of the public, but the notes and quotations I made at the time, were jotted down on the back of a letter which was mislaid, and I did not like to write from recollection in regard to a matter of this kind.

Speedside, Ont.

For the American Bee Journal.

Can One Man Take Care of Bees?

S. DANIELS.

The above subject is one which I should like to hear discussed, for in my experience I find it almost impossible for one person alone to attend to an apiary. For instance: I fill my smoker with rags or rotten wood, light it, give the bees a smoking, lay it down and begin lifting out the frames to see their condition or to find a queen. Then, perhaps, the bees will rise before one hive is half examined. I turn to my smoker and find the fire gone out, and before I can again light it, the bees are all flying, and they get the mastery.

When I began I bought a lot of bees in box-hives, with the intention of trying my hand at transferring and Italianizing them. I obtained Prof. Cook's Manual, and everything looked possible and easy. I prepared about 20 Langstroth hives in which to put all swarms, but the drouth cut everything short, and I got only 6 swarms from 15 colonies during the first season, and then I found on examining them about Sept. 15, that they were nearly out of honey and brood. I commenced feeding them moderately to start brood-rearing, then fed the 6 new colonies up to the middle of November, about 140 pounds of coffee A sugar made into good syrup for winter stores, and then packed them in leaves on the summer stands. They appear to be doing well.

But, as I said at the start, I never got to see a queen during the whole summer. I care about as much for a bee-sting as a rhinoceros does, and they have about as little visible effect on me; so, smoker or no smoker, I went through six hives, frame after

frame, to see the condition of the colony. I cut holes into the combs and looked for queens, and must say that I never got a glimpse of one. Now, that is what makes bee-keeping a mystery to me. If I could find the queens and other conditions of the colony as easily as others do who write bee-literature, I could go ahead.

I began the bee-business with considerable enthusiasm, but I must say, all things considered, that it does not pay in this section, or in any other section since sugar has become so cheap. I think, from the indications of the markets, that honey will soon have to be sold with a chromo. Every place it is marked dull or no honey wanted.

Last summer I had a trial of peddling honey in my home market, and I found it a pretty sticky business. The only hopes I have now is to get my honey in a little nicer shape in sections.

What do those signs indicate before the names of States?

Pine Grove, ♀ Ohio.

[The signs referred to indicate the part of the State in which the particular correspondent resides. Please see page 101.—ED.]

For the American Bee Journal.

Moving and Wintering Bees.

MRS. EMMA HULETT.

The season of 1884 was the poorest known here for the past 10 years, there being only half a crop of clover and no basswood. We secured only one-half a crop of honey, and we never saw bees swarm so little. We moved our bees $1\frac{1}{2}$ miles about the middle of October. We put wire-cloth over the hive-entrances, and moved them in the afternoon of a quiet, cloudy day, on a hay-rack covered with straw, making two loads from 55 colonies.

Early on the next morning my husband laid out the new apiary grounds on a small knoll in an orchard south of the house. We removed the wire-cloth and gave them their liberty, all having been put up in good order before noon, and they then had a nice "fly." In the afternoon we went to the old location to pack honey, but not one bee came back. We had noticed considerable pilfering around the hives previous to their removal, but afterward they were the most quiet lot of bees that I ever saw. They flew nearly every day all fall until they were put into winter quarters on Nov. 24, 1884.

We have always wintered our bees in an out-door cellar, until this winter, and now they are in the cellar directly beneath the sitting room. There is a 5-inch pipe extending from the cellar to the pipe above, and each has a close fitting damper which can be governed at will. The cellar is large and dry, and the bottom is flagged with large flat stones. There is plenty of air-space above and around the bees, and the fire above

them carries off the impure air and causes a circulation of pure air in the cellar. I do believe that artificial heat is needed around a bee-cellar. The mercury varied only 7° from Nov. 24 to Feb. 1, and we have had some warm days and some zero weather, but sudden changes do not affect it unless the wind blows hard from the right direction. The bees are very quiet, and as yet no dead bees are on the cellar bottom.

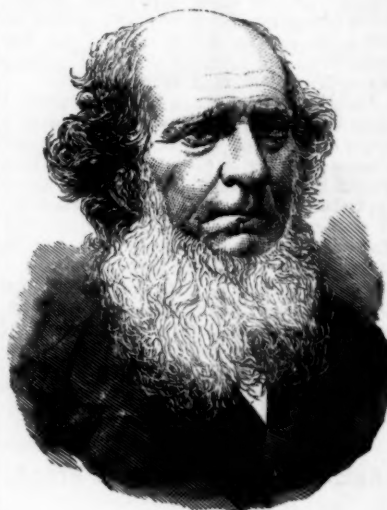
South Dayton, ♀ N. Y.

Bee-Keepers' Magazine.

Another Pioneer Gone.

EHRIK PARMLY.

William W. Cary was born Feb. 24, 1815, and died Dec. 9, 1884, at Colerain, Mass.



MR. WM. W. CARY, DECEASED.

The pioneers in modern bee-keeping are fast passing away. Still, we have the father (Rev. L. L. Langstroth) with us. Those who by their energy and ability have added to the fund of knowledge, whose lives have elevated the work their hands found to do, deserve from us some fitting notice of their labors, to encourage the young to imitate them in their lives, and their brother pioneers to not feel that they are forgotten if the hand of time has lessened their power to work in the field of their choice. Our departed friend, from his early childhood, had a great love for bees, and never lost an opportunity to study their habits when he chanced to be where they were kept. This impulse was so strong that it led him away from the ordinary amusements of boyhood.

When thirteen years of age he met with an accident that deprived him of motion in one knee. The joint became ankylosed in a partially fixed position, causing him considerable inconvenience in moving about lumber piles and the ordinary work of his mill, which is only a few rods from the

dwelling in the village of Colerain, Franklin Co., Mass.

Being thus crippled did not affect his energy or enterprise. In the autumn of his eighteenth year he obtained his first colony of bees, and from that time has never been without bees.

His last illness was long and painful, nearly eighteen months. He improved somewhat during the fine weather of last September and October, and one day walked out to the bee-yard and said he wanted to see the inside of a hive once more, and made several suggestions about preparing some of them for out-door wintering. He had 300 colonies. He also rode out several times, and his family felt much encouraged, but this improvement was of short duration. He grew rapidly worse, and died Dec. 9, 1884, in his 70th year.

He had been a bee-keeper for 52 years, and I may say he had been a student during all of those years, for he had in him by nature the true spirit of original research.

About the year 1850 he made the acquaintance of the Rev. L. L. Langstroth, who was then living in Greenfield, Mass., and they spent some time together in experimenting with bees and hives. At that time he commenced using the Langstroth movable comb hive, determining to make all the experiments he could think of that promised to shed any light on the subject, without regard to the season's surplus, that he might later work more safely, intelligently and profitably.

I would here make note of the lifelong friendship that existed between Mr. Langstroth and Mr. Cary. Their enthusiasm and devotion to the study of the honey-bee, and thorough honesty of purpose, placed them on the same level. The distinctions made by the world, having their origin in the difference of position, education or calling, were unknown to them; and had I reaped no other pleasure or benefit from bee-keeping than the friendship of such men in the ranks, I should feel more than repaid for the time spent in its study.

Early in March, 1860, he learned that Mr. Samuel B. Parsons, of Flushing, N. Y., had succeeded in importing a few queens from Italy. He visited him and spent the entire season in Flushing propagating queens, having the whole charge of Mr. Parsons' apiary. Bees for several miles around were bought or Italianized, and every precaution was taken to prevent admixture. Since then he has uninterruptedly bred the Italian queens, and has used many imported mothers in his apiary. His only son, Wm. Whiting Cary, was associated with him in business, and having handled bees from early childhood, acquired a skill and quickness that few ever attain.

Mr. Cary took great interest in the importation of other races of bees, and made transportation boxes which he sent to foreign countries accompanied by full directions; but these attempts did not meet with any success. A few years ago, a missionary from Ceylon

spent some time with him to learn practically the management of bees, and through him Mr. C. hoped to receive, some day, *Apis dorsata*, or at least some specimens of that bee and its combs; but nothing ever came of it. Since then the efforts of both Mr. Jones and Mr. Benton have thrown some light on the subject of the foreign races of bees.

Mr. Cary leaves a widow and three children to mourn his loss.

New York City.

For the American Bee Journal.

Wintering Bees in a Vault.

JOHN TRIMBERGER.

On page 140 of the BEE JOURNAL for 1884, I explained how I warmed my bee-vault by fire in a wood stove. Now, what was the result? Every time the temperature was raised to 50°, the bees would become noisy, and many left their hives to certain death near or on the sometimes red-hot stove. Those near the stove would always leave their hive *en masse* to cluster on the outside. At one time the fire had burned low, when I fed it again, leaving it to take care of itself. Upon returning in the course of an hour, I found the wood only smoldering, and, therefore, the vault was full of smoke—yes, so full of it that I left the doors open and retreated to a safe distance. Upon re-entering in a few minutes, I learned to my great consternation that the dense smoke had driven nearly every bee out of its hive in search of fresh air. A colony was sometimes clustered in two or three places on its hive.

Although a goodly number of these colonies showed signs of diarrhea before the heating process commenced, all except 4 were put out alive on March 22, 1884, the most of them being very populous, but having but little honey. By the middle of May 12 had died, and the rest were extremely weak. Having bought some to swell their number to 60 colonies, they increased to 105 by natural swarming, and produced 2,500 pounds of comb honey and 450 pounds of extracted, white clover being the only surplus yield.

By the way, the colony which was wintered out-of-doors in the gum with so much upward ventilation, was frozen to death with about 3 pounds of honey left in the hive, the extinct bees hanging in regular clusters between the combs.

On Nov. 23 I put my bees into the vault and propose never to open the door until I put them out in the spring. The vault is covered with dry earth to a depth of 3 feet, and well ventilated. They are, I think, cellared well. I confess that I am at a loss to know whether my last winter's operation was a success or failure, but, nevertheless, I am sure that I will not venture it again, especially after having noticed Mr. Doolittle's disastrous coal-oil-stove experiment.

Ashton, ♀ Wis.

For the American Bee Journal.

The Use of Drone-Traps.

HENRY ALLEY.

Several answers in reference to drone-traps were given on page 52. As I have had as much experience in the use of the drone-trap as any one, having used them for 27 years, I can, perhaps, enlighten the readers on this point. Messrs. Dadant & Son said that drone-traps were "a nuisance at the best." This fact shows clearly that they know nothing about the construction or use of a perfect trap, or they would not have made such a statement. Why will they not "back up" what they have said, by a few facts, as there are thousands of drone-traps used in this country, and by some of our most intelligent apiarists?

I think that, with one exception, not one of those who replied to the above query ever had much experience in the use of the drone-trap. One correspondent recommended the Jones' bee-guard as the best thing to use. Let us see how the bee-guard works. If placed at the entrance of a hive containing a strong colony (in which there must be a large number of drones at the season when it is necessary to use a trap), for several hours in the middle of the day, it will soon become clogged with drones which are trying to leave the hive for a flight, and if not closely watched there will be danger of the colony perishing from heat. The bees will be greatly hindered in their work, as the drones will be trying to escape for at least two hours in the busiest part of the day. What is such an arrangement worth when compared with a good drone-trap?

Now, if the trap is used, the drones will pass up into the chamber (or trap) above, out of the way of the workers, and when night comes they can be released or destroyed at the pleasure of the apiarist. When a good drone-trap is used, the bees can pass out and in as readily as though no obstruction were there. Had Messrs. Dadant & Son said the same of the bee-guard, that they did of the trap, many would have agreed with them.

Let us see what can be done with a perfect drone-trap: Suppose there are 50 colonies of bees in any apiary, and the majority of them are blacks or hybrids, and the balance pure bees of any race; or, suppose that there is no pure race, but a few of the colonies are superior workers, and possess other desirable qualities, and are, in fact, just the strain of bees which one desires to propagate. Now, perhaps all these latter colonies have swarmed, and there are some fine queen-cells which the apiarist desires to preserve; if so, it can be done easily and without trouble by removing the objectionable queens, and at the same time inserting a queen-cell in each colony as far as they will go. Then, at the proper time, place a drone-trap on each hive which has a queen-cell inserted in it, as well as at the entrances of the hives of all the other colonies whose drones are to be des-

troyed. Every one of the young queens will be fertilized by the desired drones.

While virgin queens can pass through the perforated zinc, a laying or fertile queen cannot. The drone-trap can be placed on the hive, and the necessity of destroying drone brood by shaving off their heads or by cutting out the drone comb can be avoided. And it will not be necessary for one to trouble himself about examining the trap, as is recommended when the bee-guard is used, as the former can be placed at the entrance, and need not be troubled only at the pleasure of the apiarist.

Here is another point which was overlooked: At the proper time the bees know from a natural instinct that drones are needed in the colony. If they have not the ready drone comb for use, they will find room for the queen to deposit drone eggs somewhere in the hive. Every small hole or opening in the combs will be utilized by the bees for this purpose. If there are any combs which do not quite fill the frames at the bottom or sides, the bees will construct drone-cells, and will rear drones in this way. When that will not work to suit them, they will rear them in the caps. When drones are needed, the bees will follow their instincts and rear them, and all "cutting and slashing" of combs will not prevent them from doing so. Would it not be a pretty job to go over 100, or even 50 colonies, of bees, and cut out the drone comb and fill the places with comb foundation?

When speaking of "nuisances" in the apiary, all of the most experienced know that complaint has been made against every new implement devised, all the races of bees, movable combs, frame hives of all descriptions, smokers, and even comb foundation—all have had their turn. Well, we can get along without comb foundation, the movable-frame hive, smokers, and drone-traps, but it would be very inconvenient.

Wenham, ♀ Mass.

For the American Bee Journal.

Handling Bees—Bee-Diarrhea.

GUSTAV LEOPOLD.

I have handled bees for 29 years, and I find a good deal of pleasure in it. I can deal with them like flies, picking up handfuls of them with my bare hands. I can take a whole hive full of bees and empty them over my naked body without receiving a sting. When the season for swarming comes, I simply shake the bees into my hat, (if I cannot do this, I scrape them in with my hands), and then carry them to the hive. In this way I have often-times hived from 20 to 35 swarms in one hour.

I have a bee-house made out of matched flooring, 200 feet long, 5 feet high and 3 feet wide, just wide enough to slip in the hives. It has a roof sloping toward the north, and it has doors on the south side hanging on hinges, which I can close at any time when it is necessary, but I have them closed as long as there is snow on the

ground, and I keep the snow shoveled up almost to the roof. I left a space about $\frac{1}{4}$ of an inch wide to let in fresh air. As soon as the snow is all gone, I raise the doors, and as soon as the weather is warm for a few days in March, I place pans of rye flour a few feet from the hives. This rye flour every bee-keeper ought to give to his bees. They use it only for rearing their brood, and it makes them swarm early, and also makes them produce large swarms.

Ever since I have kept my bees housed up, I have never lost a colony. I used to lose a good many colonies by diarrhea, generally in the spring, and sometimes in the summer, until I found a very cheap cure for it. I fill shallow troughs nearly full of rain-water, and then put a small handful of rock-salt into each of them. This I give to them from spring until fall, and ever since I have used this remedy I have never lost another colony. I believe that they take the salt-water to their hives to purify their honey; and I also have no trouble with foul brood since I used the salt-water.

The honey harvest was a very poor one here last season. I had 100 colonies last fall, and sold 50 of them at \$10 apiece. I use the Langstroth hive.

Joliet, Ills., Feb. 4, 1885.

For the American Bee Journal.

The Nebraska State Convention.

The Nebraska State Bee-Keepers' Association met at Tecumseh, Nebr., on Jan. 14, 15 and 16, 1885. On account of the extreme cold and stormy weather but few of the members of the Association were present at the first session. More came in on the second day, and with the addition of new members, the meeting proved to be very interesting.

Mr. T. L. Von Dorn, of Omaha, and Mr. S. L. Thomas, of Plattsmouth, were re-elected as President and Vice-President respectively. Mr. W. F. Wright, of Johnson, Nebr., was elected Secretary, and Mr. R. E. Leach, of York, was elected Treasurer. The reports made by President Von Dorn and ex-Secretary M. L. Trester, as delegates to the Bee-Keepers' Convention at Chicago, last fall, elicited general discussion.

Mr. M. L. Trester read a very interesting essay on an experiment made by him during the past year to ascertain at what age bees begin to work. His essay brought out many facts that were new to most of those present, and by resolution he was requested to publish his experiment in the papers of the State.

The form of a Bill to be presented to the State Legislature, which is now in session, for its action, was drafted expressing the wishes of the Association for more complete and thorough organization, and for the protection of the bee-keepers of the State. A feeling seemed to exist among the members for such an organization to fully represent the bee-interests of the State, and will, without doubt, result in the formation, ere long, of an

organization whose good effects will be felt generally.

In regard to the "Hunt Honey Fraud:" The executive committee was fully sustained by the Association in their opposition to the introduction of adulterated honey into the State by Mr. F. H. Hunt, of Centre Point, Iowa, which has resulted in the removal of such honey from the State.

Mr. Margrave, of Kansas, being present, was, on motion, elected an honorary member of the Association.

The topics discussed were generally led by G. M. Hawley and M. L. Trester, of Lincoln, R. V. Muir, of Brownville, T. L. Whitbeck, of Wahoo, J. N. Grant, of Beatrice, T. S. Corbett and S. L. Thomas, of Plattsmouth, and Mrs. Heater, of Columbus. All being veterans in the manipulation of bees, one would think that they had always lived inside of a bee-hive.

By resolution, the next annual meeting will be held at Lincoln, Neb., on the second Wednesday in January, 1886.

W. F. WRIGHT, Sec.

T. L. VON DORN, Pres.

The International Congress.

The Convention will assemble at 10 a. m. in the Lecture Hall on the Exposition Grounds. Among the subjects which will be considered during the sessions of the Convention will be reports of the honey resources and production of America and Europe; preparation of honey for market; transportation; lower rates of freight; marketing; the advantages of the use of comb foundation; sections, the best size and the best way to use them; the best race of bees for America; prevention of swarming; fertilization of queens; bee-pasturage; bee-keeping as a pursuit; besides the discussion of other questions of interest that will be propounded. Essays to elicit discussion are expected from some of the most prominent bee-keepers of Europe and America.

Bees and bee-keepers' supplies for exhibition must be sent with *all freight prepaid*, and directed to Maj. E. A. Burke, Director General of the Exposition, for Department of Agriculture, New Orleans, La. The Board of Management of the Exposition has established a Department of Information and Accommodation, at Nos. 164 Gravier and 15 Union streets, for the purpose of furnishing visitors with information as to suitable board and lodging houses, or furnished rooms with directions how to reach them. For such service no charge is made.

Bee-keepers, on arrival in the city, are advised to go at once to the office of this department and make the best arrangements that they can for quarters, and if they will leave their cards and address at the same place, their friends will know where to look for them. The most of the visitors to the Exposition find it best and cheapest to rent rooms and take their meals at restaurants. Furnished rooms will cost from 75 cents to \$1 for each person, per day, and board and lodging about double these rates. We are

assured that the hotels have not advanced their rates, which are \$2 to \$3, according to location of rooms, etc.

THE COMMITTEE.

As a means of recognition, bee-keepers going to New Orleans should wear Badges. It will help to make acquaintances, and add much pleasure to the trip. We have made a lot, having, besides the gold bee, the words "New Orleans Bee-Keepers' Congress" in large gold letters. Price 10 cents; also some with a rosette and gold fringe, price 50 cents.

The regular price of a ticket from Chicago to New Orleans and return by any route, is \$20; but "return tickets" have been sold by "scalpers" for much less. The regular tickets can be obtained at any railway ticket office in the Northern States, at a correspondingly low rate. The Scalper's tickets can only be "picked up" occasionally.

Convention Notices.

The third annual convention of the Eastern Iowa and Western Illinois Bee-Keepers' Association will meet at Moore's Hall, Davenport, Iowa, on Feb. 18, commencing at 10 a. m., and lasting two days. Bee-keepers' headquarters will be at the Newcomb House, where rates have been reduced to \$1.50 per day. Honey, beeswax, or apiarian supplies for exhibition should be sent to L. Hall, who will take charge of them, at the depot or express office, and return the same as owner may direct. It is expected that this will be the largest and most interesting meeting ever held in the State. Everybody invited to attend.

L. V. McCAGG, Pres.

WM. GOOS, Sec.

We had a regular Iowa blizzard on Jan. 16 and 17, which made travel either by sleigh or rail almost impracticable; therefore, the Marshall County Bee-Keepers' Association failed to have a meeting on Jan. 17, 1885, as announced. It will meet at the Court House in Marshalltown, Iowa, on Feb. 21, 1885, at 10:30 a. m. The programme will be the same as announced for the Jan. 17 meeting. All having any thing of interest to apiarists are requested to bring it along. A general invitation is extended.

J. W. SANDERS, Sec.

The Willamette Valley Bee-Keepers' Association will hold its second meeting at La Fayette, Oregon, on the third Tuesday in June, 1885. All who are interested are invited to attend.

E. J. HADLEY, Sec.

The Progressive Bee-Keepers' Association of Western Illinois will meet in Bushnell, Ills., on Thursday, May 7, 1885. Let every bee-keeper who can, be present and enjoy the meeting.

J. G. NORTON, Sec.

The Eastern New York Bee-Keepers' Association will hold its annual convention at Albany, N. Y., in Horticultural Hall, on Wednesday and Thursday, Feb. 18 and 19, 1885. Three sessions will be held each day. The first session beginning at 10 a. m., on Feb. 18.

SOLOMON VROOMAN, Pres.

Local Convention Directory.

Time and place of Meeting.

1885.
 Feb. 17.—Ohio State, at Columbus, Ohio.
 C. M. Kingsbury, Sec., Mt. Vernon, O.
 Feb. 18.—E. Iowa and W. Ills., at Davenport, Iowa.
 Wm. Goos, Sec., Davenport, Iowa.
 Feb. 18, 19.—Eastern New York, at Albany, N. Y.
 Solomon Vrooman, Pres., Seward, N. Y.
 Feb. 21.—Marshall County, at Marshalltown, Iowa.
 J. W. Sanders, Sec., LeGrand, Iowa.
 Feb. 24-26.—International, at New Orleans, La.
 Feb. 24, 25.—Cedar Valley, at Cedar Falls, Iowa.
 A. D. Bennett, Sec., Waterloo, Iowa.
 Mar. 11.—New Jersey and Eastern, at N. Y. City.
 W. B. Treadwell, Sec., 16 Thomas St., New York.
 April 3.—N. E. Kansas, at Hiawatha, Kans.
 L. C. Clark, Sec., Granada, Kans.
 Apr. 28.—Des Moines County, at Burlington, Iowa.
 Jno. Nau, Sec., Middleton, Iowa.
 May 4.—Linwood, Wis., at Rock Elm Centre, Wis.
 B. Thomson, Sec., Waverly, Wis.
 May 7.—Progressive, at Bushnell, Ills.
 J. G. Norton, Sec., Macomb, Ills.
 May 28.—N. Mich. Picnic, near McBride, Mich.
 F. A. Palmer, Sec., McBride, Mich.
 June 10.—Willamette Valley, at La Fayette, Oreg.
 E. J. Hadley, Sec.
 Dec. 8-10.—Michigan State, at Detroit, Mich.
 H. D. Cutting, Sec., Clinton, Mich.

☛ In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—Ed.

SELECTIONS FROM OUR LETTER BOX

Bees at Work on Maples.—M. T. Hewes, New Roads, La., writes thus:

My bees have come through the winter in splendid condition, and are now working on the gum and maple trees.

Bees are Quiet.—Wm. Bolling, Dunkirk, N. Y., on Feb. 6, 1885, says:

From 5 p. m. yesterday until 6 a. m. this morning, the mercury fell from 24° above zero to 4° below. My bees are quiet and wintering splendidly so far. On Dec. 29, 1884, they had a good fly, and since then they have been housed up. They are packed in chaff on the summer stands.

But Little Honey Eaten.—3—Chas. Sitts, (18-36), Brasie Corners, N. Y., on Feb. 7, 1885, writes thus:

I weighed each hive in my apiary on Sept. 19, 1884, and fed all colonies up to the required weight. On placing them in the cellar on Nov. 14, I found that one hive weighed only 39¼ pounds, and as there could only be 10 pounds of syrup in that hive, I felt a little afraid that the food of that colony would become exhausted before spring; therefore, I weighed the same hive again to-day, and find that it weighs 38¼ pounds, the colony having consumed only one pound of sugar syrup during 2 months and 22 days of confinement. There were about 200 dead bees on the bottom-board. The colony is of medium

size, and has no brood. My bees are wintered in a cellar whose temperature I keep at 42° Fahr., never allowing it to vary 2° from that point. The cellar is well ventilated, and I also ventilate the hives considerably, employing both upper and lower ventilation.

The Number of Colonies.—D. L. Whitney, (21-27), Rockton, Ills., on Feb. 6, 1885, says:

I notice that nearly all who write for the BEE JOURNAL give, after their names, their number of colonies in the spring, and also the increase. I would like to have another figure added after the bees have come out of winter quarters in the spring; for instance, 72-95-87, thus indicating the loss, if any, during winter.

[Two numbers are enough. When the spring comes—the first will signify the number last fall; the second, the number with which to begin spring operations, thus omitting the former spring count.—Ed.]

The Bees Bringing in Pollen.—Z. A. Clark (41-85), Arkadelphia, Ark., on Feb. 6, 1885, says:

My Italian bees are bringing in pollen from alder, which grows along the creeks. In 1884 I began with all black bees excepting one colony of Italians which was wintered during the winter of 1883-84 in a small box 13x8x9 inches. It came through strong in bees, and now nearly all my bees are Italians and hybrids. They had some symptoms of bee-diarrhea, but none proved fatal. Here, our honey crop is gathered from linden, white aster, holly, rattan, cotton, corn, persimmon, maple, elm, cottonwood, and a great many other varieties of plants.

The Weather.—John Morris, Mauston, Wis., on Feb. 9, 1885, says:

At this writing the snow is hurrying down upon us from the northeast, and how this weather will finally end interests all of us. The weather has been rather moderate for a week past, yet we are looking for the next cold blast.

Fastening Foundation in Frames.—Friedemann Greiner, Naples, N. Y., on Feb. 9, 1885, says:

While there are several good ways of fastening sheets of foundation in frames, still it has occasionally occurred to me that none of these would "fill the bill." Quite frequently I have wanted to fasten a single sheet or part of a sheet, or a queen-cell, in a frame without going to the trouble of melting up wax, or even going to the shop, and I have hit on different plans; but this process with the wax candle, which we find recorded in Gravenhorst's *Illustrierte Bienen Zeitung* for December, 1884, seems to just fill the vacancy. Perhaps it will not be necessary to tell how to make a wax candle. Have it 1¼ inches thick, and use common candle wick-

ing (two thicknesses) for the wick. To operate with this candle, "hold it in a horizontal position, so the flame will melt off the wax, then let this drip to wherever you want a union between foundation or queen-cell and the wood." I have tried these candles and find that they work quite well, although for rapid work—for business—I shall stick to the old method.

Report, from Wm. Shier, Marlette, Mich., on Feb. 5, 1885:

My report for the season of 1884 is anything but flattering. In the autumn of 1883 I put into winter quarters 100 colonies in apparently good condition; but when Jack Frost relinquished his grasp, and the spring of 1884 finally opened, there were only 5 colonies remaining, and those were in a very indifferent condition. However, during the summer they increased to 20 colonies, including one Italian nuclei which I purchased, and I obtained 500 pounds of surplus comb honey. My bees are now in apparently good condition, 14 of the colonies being in the Fisher chaff hive on the summer stands, and 6 in the Heddon hive in the cellar. The winter, so far, has been very cold.

Report, from E. W. Powell, Mankato, Minn., on Jan. 22, 1885:

My father and I have 130 colonies in good condition in the cellar. We use a hive about the size of the Langstroth with the frames running crosswise. Our bees are Italian hybrids. We commenced the season of 1884 with 76 colonies, increased by division to our present number, and obtained about 2,000 pounds of extracted and 1,000 pounds of comb honey in one-pound sections, which is a good yield for the past season in this locality. I think that I have learned something during the past season, and one thing is, how to make bees build combs, as I have nearly 2,000 one-pound sections filled with nice, white comb for next season's use. Next season I shall try to learn how to get the bees to fill them.

Bees Bringing in Pollen.—B. F. Carroll, Dresden, Tex., on Feb. 7, 1885, writes thus:

I have been very busy sowing oats. My bees are busy bringing in pollen, and appear to be in a fair condition. The weather is pleasant, with the mercury at 65° Fahr. at noon to-day.

Bees have Wintered Well.—W. A. Pryal, North Temescal, Calif., on Feb. 3, 1885, says:

I do not know when bees did better during winter than they have this winter. All danger is past, and everything is just a-booming. The year for farmers and horticulturists bids to be a good one, and it may also be said with certainty that it will be so for apiarists. I could name 100 flowers which are now in bloom here, but the *eucalyptus* is the favorite with the bees.

Report, from Samuel Hall, Topeka, Kansas, on Feb. 5, 1885:

I had 26 colonies of Bees last fall; and about Jan. 1, 1885, there was a day or two of warm weather when all of them had a nice fly and appeared to be all right. Yesterday I examined them and I think that every bee is dead. I have about the same number of colonies some 5 miles from here that I have not yet examined.

Dampness the Cause of Bee-Diarrhea. 8—Fayette Lee, (48—80) Cokato, Minn., on Feb. 7, writes thus:

Honey gathers dampness, moisture from the bees' breath accumulates on the combs, and the deeper the snow the damper will the cellar be. If any one will enter the cellar now or in March and raise the covers of the hives, he will find water dropping off and running down among the bees. Dampness causes strong colonies to rear brood, and if the young bees cannot have a fly, death is the result. Sugar syrup is the best feed to winter bees on, because it does not gather dampness. The bees eat a little pollen in winter to make them fat for spring work. They do not get enough pollen in winter, but they get too much water. If I find watery looking stuff in the bees that I sweep up on the cellar bottom, I am sure to lose lots of bees before May; but when dry cappings are found at the entrances of the hives, all is well. I think that Mr. Doolittle is mistaken in regard to old bees not eating pollen.

Bees Affected with Diarrhea.—Jesse White, Perry, Iowa, on Feb. 6, 1885, writes as follows:

The past season was very unfavorable for bees in this section, on account of its being so wet, I think. Last spring I started with 11 colonies, increased them to 23 during the season, and obtained about 50 pounds of honey. In the fall I built a board fence and put my bee-hives south of it, and packed the spaces between and back of them with prairie hay, and covered them over and shaded the fronts with boards to keep the bees from flying when it is too cold. They had a flight on Jan. 8, having been confined for about 40 days. They had another "fly" on Feb. 2 and 3. I have lost one weak colony, and found a dead queen at the entrance of one hive. Some of them have the bee-diarrhea badly, honey-dew being the chief cause, I believe. We have had a very cold winter thus far, the mercury ranging, for the past 7 or 8 weeks, from 10° to 35° below zero in the morning.

Bees Doing Well.—Henry Alley, Wenham, Mass., on Feb. 9, 1885, writes as follows:

My bees have been housed for nearly 11 weeks. I examined a few of them last week, and they seemed in as good order as when on the summer stands. The temperature of my bee-house varies from 25° to 55° above zero. There is no sub-earth ventila-

tion to it. I do not let the temperature remain at 25° for more than 24 hours at any one time. I have a tin box in which I can place a kerosene lamp so arranged that the light cannot be seen, and the heat of the lamp will raise the temperature to 42°. By turning the wick up I can raise the temperature to 50°. Less than four quarts of bees have died from 43 colonies. They are not uneasy. I have one upward ventilator 10 feet in height and 6 inches square in the house. There is no mold or dampness in the bee-house.

Special Notices.

Do not forget that on Feb. 23rd, 1885, the books will be opened for the subscription of stock to "The Bee-Keepers' Supply Company of Newcomerstown, Ohio." Every bee-keeper that can should subscribe for some stock. This will certainly be a profitable investment for bee-keepers.—adv.

Catalogues for 1885.—We have received the following:

L. L. Triem, LaPorte City, Iowa.
S. Valentine & Son, Hagerstown, Md.
Industrial Publication Co., 294 Broadway, New York.—Books.
Bush & Son & Meissner, Bushberg, Mo.—Grape Vines.

We often get a number of notices and advertisements on Mondays, intended for the next BEE JOURNAL. As we close the forms on Saturdays, all such notices must be here on Saturday morning, or cannot appear until the following week.

Our rates for two or more copies of the book, "Bees and Honey," may be found on the Book List on the second page of this paper. Also wholesale rates on all books where they are purchased "to sell again."

FRUIT GROWING.—We have received a copy of an illustrated pamphlet of 64 pages, entitled "How to Propagate and Grow Fruit," by Chas. A. Green, editor of the *Fruit Grower*, Rochester, N. Y. Price 50 cents. To any one sending us a new subscriber for the Weekly or 4 for the Monthly, besides his renewal for either edition, we will present a copy of this book.

We want one number each of the JOURNAL of Aug. 1866, Feb. 1867. Any one having them to spare will please send us a Postal card. We will take the first that offer them, and pay 25 cents each for the 2 numbers.

CLUBBING LIST.

We will supply the American Bee Journal one year, and any of the following Books, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both. Club
The Weekly Bee Journal.....	\$3 00..
and Cook's Manual, latest edition	3 25.. 3 00
Bees and Honey (T.G. Newman) cloth	3 00.. 2 75
Bees and Honey (paper covers).....	2 75.. 2 50
Binder for Weekly Bee Journal.....	2 75.. 2 50
Apiary Register for 100 colonies	3 25.. 3 00
Dzierzon's New Bee Book (cloth).....	4 00.. 3 00
Dzierzon's New Book (paper covers) ..	3 50.. 2 75
Quinby's New Bee-Keeping.....	3 50.. 3 25
Langstroth's Standard Work.....	4 00.. 3 75
Root's A B C of Bee Culture (cloth) ..	3 25.. 3 10
Alley's Queen Rearing.....	3 00.. 2 75

The Weekly Bee Journal one year

and Gleanings in Bee-Culture (A.L. Root)	3 00.. 2 75
Bee-Keepers' Magazine (A.J. King) ..	3 00.. 2 75
Bee-Keepers' Guide (A.G. Hill).....	2 50.. 2 35
Kansas Bee-Keeper.....	3 00.. 2 75
The Apiculturist, (Silas M. Locke) ..	3 00.. 2 90
The 6 above-named papers.....	6 50.. 6 00

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Appeal to the U. S. Supreme Court Of the Suit on the "BOSS" ONE-PIECE SECTIONS.

As there has been considerable contradiction concerning the present state of our lawsuit against A. I. Root, Medina, O., for infringement of our patent, by manufacturing one-piece sections, we have concluded to put the whole correspondence before the public. After reading it, we think there will be no misunderstanding of our position. The following was an editorial, published in "Gleanings in Bee-Culture" dated Dec. 15, 1884:

FORNCROOK'S PATENT.

At the convention at Lansing, Mr. Forncrook scattered large numbers of circulars (without date), containing the following notice:

READ THIS!

A word of explanation in regard to the infringement suit on the One-Piece Section, we deem necessary at this time.

I commenced suit against A. I. Root, in the United States Circuit Court, for the Northern district of Ohio; Stanley Matthews presiding. He decided that the patent was ANTICIPATED. I have taken an appeal to the United States Supreme Court at Washington, which will decide the case, and its decision will be final. If it goes against me I will submit, but if decided in my favor, I shall expect all who have infringed will pay me damages from date of the patent.

Some unprincipled parties are advertising that the Courts have decided that the patent is void. This is not the case, as it is before the United States Supreme Court at Washington, at the present time. When that Court gives its opinion it will be final, and until it does, any one infringing will be liable for damages, if the United States Supreme Court sustains the patent.

JAMES FORNCROOK.

I mailed one of these to Gen. M. D. Leggett, ex-Commissioner of Patents, who, I presume most of our friends know, is as good authority on such matters as we have in the world. I asked him to give me a reply that I could publish. Here it is:

A. I. ROOT, Esq.

Dear Sir:—James Forncrook has not taken an appeal from the decision of the Court here against him. If he does take an appeal hereafter, it will be only for the purpose of being enabled to bulldoze the market.

The decision here was rendered by Justice Matthews, of the United States Supreme Court, and no judge on the Supreme Bench is more liberal toward patentees than Justice Matthews is.

There is certainly no probability, and I do not believe there is any possibility, of the Supreme Court ever reversing the decision made by Justice Matthews here. To use the threat of appeal against purchasers of your honey-box blanks, is an outrage which I am sure your customers will not encourage by purchasing of Forncrook. Judge Matthews decided that Forncrook's alleged invention was fully anticipated by previous manufactures, and also by patent No. 157,473, granted to Hutchins, December 8, 1874, and no honest and intelligent man can ever come to any other conclusion than that, if Forncrook ever takes an appeal, it will be only to hold the case in the Supreme Court as long as he can; but he will be certain to withdraw it, and pay his costs before date of hearing.

Very Respectfully, etc.,

M. D. LEGGETT.

Cleveland, O., Dec. 13, 1884.

We referred the matter to our attorney, Judge Wells, of Detroit, Mich., and the following is his reply:

FORNCROOK'S PATENT.

MR. JAMES FORNCROOK, Watertown, Wis.

Dear Sir:—I have received yours of the 20th inst., enclosing a printed statement of A. I. Root, published in his "Gleanings in Bee-Culture," Dec. 15th. This statement contains a copy of a circular issued by you, stating that you had taken an appeal to the Supreme Court at Washington, in the case of Forncrook vs. Root; also a letter from Gen. M. D. Leggett to A. I. Root, dated December 13th, 1884, stating that you had not taken an appeal.

A brief statement will set this matter at rest. Judge Matthews rendered his decision August 6th, holding that your patent was anticipated by previous manufactures. Soon after you instructed me to take an appeal, and I applied to Judge Matthews to fix the amount of the appeal bond which the law requires. He did so. You then furnished me a bond, the sufficiency of which was certified in the manner directed by Judge Matthews.

Just as I was about to forward this bond to Judge Matthews for approval, I ascertained that Root's counsel, by their own negligence, had failed to enter their decree dismissing the bill, which they should have done August 8th. Of course you know the decree must be entered before an appeal could be taken.

Then they proposed a decree containing statements that Judge Matthews held your patent void. On the other hand, I proposed a decree striking out these statements, and simply dismissing your bill. Judge Matthews agreed with me, and the decree as I proposed it, was entered on the 24th of November, as of the date of August 8th, and an appeal expressly allowed to you. The appeal can now be perfected.

So that your statement in your circular that you had taken an appeal is strictly true. Gen. Leggett's statement that you had not taken an appeal, when you had begun to do so, and was prevented perfecting it by the negligence of Root's counsel, looks very like a quibble.

From the above statement you will see Judge Matthews expressly refused to decide that your patent was void.

I am not in the habit of trying cases in which I am counsel in the newspapers, but Gen. Leggett's statement impugning your good faith in taking an appeal, is entirely unwarranted, and worse. His predictions as to what the Supreme Court will decide, are not very valuable, when it is remembered he is one of Root's counsel. We will leave the case for the decision of the Supreme Court at Washington, which will be final. In the meantime you are justified in issuing the circulars, stating your rights and intentions.

Respectfully yours,

WILLIAM F. WELLS.

Detroit, Mich., Dec. 22, 1884.

The foregoing statement carefully prepared to give the exact facts in the matter, by Judge Wells, was promptly sent by us to Mr. Root, with the request to publish it, and thus give the readers of "Gleanings" the truth in the matter. To this letter Mr. Root replied as follows:

JAMES FORNCROOK, Watertown, Wis.

Dear Sir:—Please excuse delay in answering your letter, recently received. I sent it at once to Gen. Leggett for explanation, and expected one before our issue of the 15th went to press. For some reason Leggett has not replied as promptly as usual, so we will have to delay till next issue. To avoid anything in the papers looking like a controversy, I think Leggett's reply ought to be given in the same number.

Yours, A. I. ROOT.

Instead of publishing the statements of the lawyers on each side "in the same number" of his "Gleanings," Mr. Root published the following as an editorial:

In our December number, page 859, Gen. Leggett declared that Forncrook had not then taken an appeal. Mr. F. sent us a statement from his lawyer, declaring the appeal to have been taken, and that the clause in Forncrook's price list was fully authorized. I am sure I do not know who is right in the matter—perhaps both are right—Forncrook meaning that steps had been taken to take an appeal, and I think Gen. Leggett was cer-

tainly correct in saying that Mr. F. had not taken an appeal. Mr. J. A. Osborne, who had charge of the case, writes that on the 6th of January, Forncrook filed a bond with the clerk of the Circuit Court, for the purpose of taking an appeal, and I am to-day, Jan. 6th, officially notified that such an appeal has now been taken. I do not know that it makes any very great difference when the matter is commenced, more than that, if any statements have appeared in "Gleanings," not strictly true, it was because we were wrongly informed; and whenever we are satisfied that we have been wrongly informed, we are always ready to retract.

After waiting a full month for Mr. Root to publish Judge Wells' statement of the case, and when "Gleanings" for Feb. 1st came to hand without it, we wrote him the following letter:

WATERTOWN, WIS., Feb. 5, 1885.

MR. A. I. ROOT, Medina, O.

Dear Sir:—Your letter dated Jan. 5, 1885, came duly, and stated that you had sent Mr. Wells' communication in reply to your article on the appeal of the one-piece-section suit, to Gen. Leggett for explanation; that Leggett had "not replied as promptly as usual," and then you say, "we will have to delay it till our next issue." You then added that you thought "Leggett's reply ought to be given in the same number."

The next number came dated Jan. 15, but still Mr. Wells' reply was not given.

Your item on page 73 does not cover the ground. I am placed in "the lie" before your readers in the Dec. 15th number, and so left by the Jan. 15th issue. I fully expected you would have Mr. Wells' letter and Gen. Leggett's in "Gleanings" for Feb. 1, but that number has come to hand without any reference to it.

Will you please state by return mail why you have not done as you promised me in your letter of Jan. 5, as quoted above; and whether you will or will not do so; and, if you will do so, when?

Respectfully, JAMES FORNCROOK.

To this he replied as follows, positively declining to retract his false statements in "Gleanings":

MEDINA, O., Feb. 9, 1885.

JAMES FORNCROOK, Watertown, Wis.

Friend F.:—At the time we wrote you, I did intend to publish your letter with Leggett's, but I don't see that I made any promise. I was waiting Leggett's reply, and when I received it, I was satisfied that too much space, if anything had already been given the matter. The editorial notice we gave, was, I think, very kind and courteous, under the circumstances. If any other bee-paper chooses to give space to the matter, it can do so, but I am pretty well satisfied that no more room will be occupied with it on the pages of "Gleanings." Yours, A. I. ROOT.

CONCLUSIONS.

By the foregoing we have proved, beyond successful contradiction—

1. That we had taken an appeal to the Supreme Court of the United States, against the decision of Judge Matthews that the patent on one-piece sections was ANTICIPATED. The decision of that Court will be final.
2. That we were only prevented from perfecting that appeal by the negligence of Mr. Root's counsel—and that the appeal is dated Aug. 8, 1884.
3. That our announcement to bee-keepers, quoted at the head of this article, was fully warranted and strictly correct.
4. That Mr. Root's refusal to publish the facts, when sent him for that purpose, (and thereby clear us from his charge of falsehood), is unjust and unreasonable, and if he had any regard for TRUTH he would have published it as widely as he did his statement to the contrary.

JAMES FORNCROOK & Co.

Watertown, Wis., Feb. 13, 1885.

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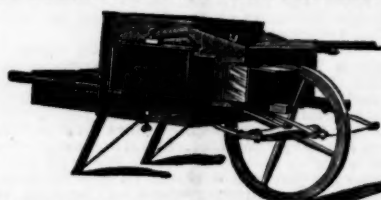
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